

### **REMARKS**

This Amendment, which is timely with the automatic grant of the accompanying one-month Petition for Extension of Time, is submitted pursuant to 37 C.F.R. § 1.111 in response to the non-final Office Action dated May 27, 2005, wherein the drawings were objected to as failing to show a claimed feature; the claims were objected to as being crowded too closely together, claim 17 was objected to because of an informality, claim 20 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, and claims 1 – 26 were rejected as being anticipated or obvious in view of the prior art. By this amendment, applicant has amended the specification and drawings, and has amended claims 1, 10, 17 and 21. Claims 1 – 26 remain pending. Reexamination and reconsideration in view of the foregoing amendments and following remarks are respectfully requested.

#### **Interview Summary**

Applicant wishes to thank examiner Blevins and his supervisor for the courtesy extended during the telephonic interview conducted on August 24, 2005. During the interview the undersigned explained certain distinguishing features of the claimed invention *vis-à-vis* the prior art cited by the examiner or otherwise of record in the case. Although additional features were explained, the discussion primarily centered on one important feature that is recited in all of the claims, namely the fact that the present invention uses pairs of deflecting electrodes that are off-axis from each other (*i.e.*, tilted), so that the range of deflection angles can be varied, for example, when there is an array of deflecting electrodes in a switching device and the range of required angular deflection changes as a function of the position on the device. During the interview supervisory examiner said that the claims would be patentable if amended to more clearly recite what is meant by “tilted”. Accordingly, consistent with what was discussed, all of the claims have been amended to recite this feature more clearly, as described below.

As to the objection that the claims are too closely spaced, it was agreed that the submission of a new (replacement) listing of claims would cure the objection. This amendment includes a new listing of all of the pending claims.

As to the rejection of claim 20 under 35 U.S.C. § 112, second paragraph, applicant explained that in one embodiment of the present invention the common waveguide, which is positioned between the input and output sides of the claimed switching module, has an index of

refraction that is less than the material used for the input and output sides. It was explained that this feature provides enhanced deflection of the light signal as it crosses the boundary between the input side and the common waveguide (and vice versa as to the output side), as depicted in FIGS. 8 and 10. It was then agreed that this rejection would be withdrawn.

#### Amendments to Drawings and Specification

The examiner objected to the drawings for failing to show a feature recited in the claims, namely the curved electrode surface recited in original claims 6 and 16. Accordingly, applicant has added new FIG. 14 which shows an electrode having a curved surface. New FIG. 14 is identical to FIG. 12, except for the curved electrode surface and the removal of ray lines and numbering. A new paragraph [0028.1] has been added to the Specification to provide a brief description of new FIG. 14. In addition, paragraph [0068] of the Specification has been amended to refer to new FIG. 14. Support for these amendments is found in paragraph [0068] as originally filed, and in claims 6 and 16 as originally filed. No new matter has been added.

Because a new drawing sheet has been added, the header on the remaining drawing sheets has been updated to reflect that there are now a total of 10 sheets rather than 9, as previously indicated.

#### Claim Amendments and New Claim

Claim 17 has been amended to correct the error noted by the examiner. This amendment overcomes the examiner's objection to claim 17.

As discussed during the interview summarized above, independent claims 1, 10 and 21 have all been amended to recite that the electrode pairs define axes that are tilted in respect to each other. Applicant submits that these amendments merely clarify what was always the intended scope of the claims. It is noted that none of the prior art of record shows electrode pairs that are tilted. Based on the examiner interview it is believed that these amendments put the case in condition for allowance. If the examiner believes there is a better way to revise the claim language, he is invited to call the undersigned.

New claim 27 is similar in concept to claim 1, but does not require that each deflecting element comprise a pair of similarly shaped electrodes on opposite sides of a slab waveguide. While the use of similarly electrodes is preferred, it was known in the art that a bending field can

be induced in a slab of electro-optical material using a top electrode having a defined shape (such as triangular) where the bottom electrode is ground plane having a different shape. Accordingly, it is believed that claim 1 is more limiting than is necessary. It is noted that original independent claims 10 and 21 do not require that there be pairs of similarly shaped electrodes.

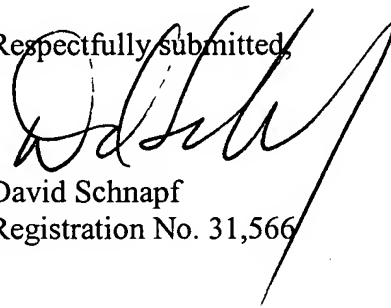
Conclusion

For the foregoing reasons it is respectfully submitted that all of the pending claims, as amended, are in condition for allowance, and such action is earnestly solicited. The examiner is invited to call the undersigned at the number listed below if there are any remaining questions, or if such action might advance the prosecution of this application.

September 16, 2005

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'David Schnapf', written over the typed name and registration number.

David Schnapf  
Registration No. 31,566

**Amendments to the Drawings:**

Attached is a new drawing sheet 10, adding new FIG. 14. FIG. 14 has been added to show the curved electrode surface recited in claims 6 and 16. Also attached are "Replacement" sheets 1 – 9. The only change on these replacement sheets is to revise the number of total sheets as shown on the header. Thus, the header of sheets 1 – 9 have been revised to indicate "1 / 10", "2 / 10" ..., "n / 10", etc., rather than "1 / 9", "2 / 9" ..., "n / 9", etc. respectively. No changes have been made to any of FIGS. 1 – 13 themselves.

Attachments: 9 Sheets of Replacement Drawings  
1 Sheet with new FIG. 14